

4340M (300M)

Smiths Advanced Metals

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Higher Strength & Toughness

Chromium-Nickel-Molybdenum Steel Bars.

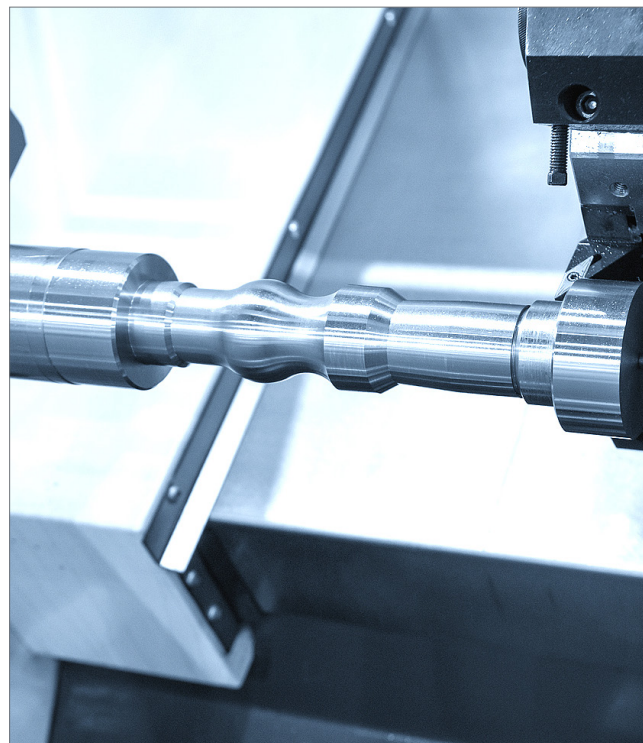
4340M is a low alloy steel that combines high strength with good toughness and fatigue strength.

4340M include vanadium and a higher silicon content to produce even higher strength levels when compared to 4330M. With high transverse ductility, toughness, and creep characteristics, the alloy is ideal for applications where strength and fatigue resistance are primary considerations, along with impact strength and fracture toughness.

The alloy is often referred to as an aircraft-quality steel and finds extensive use in aerospace applications, including airframes, bolts, fasteners and landing gear.

4340M offers good ductility and is classed as a through hardening alloy.

Smiths Advanced Metals stocks [4340M steel bars](#) in the normalised and tempered condition. Our steel bars are stocked in closer incremental sizes, which often removes the need for extra machining.



Grades / Specifications

■ AMS6257	■ C-05-1190
■ AMS6417	■ MIL-S-83135
■ AMS6419	■ MIL-S-8844
■ BMS 7-26	■ MTL1202
■ BS S100	■ UNS K44220
■ BS S155	■ ZFNL 9207

Benefits

- Excellent transverse properties
- Good fatigue resistance
- Very high strength
- Good ductility

*Chemical Composition (weight %)

	C	Cr	Mn	Mo	Ni	P	S	Si	V	Cu
min.	0.40	0.70	0.65	0.35	1.65			1.45	0.05	
max.	0.44	0.95	0.90	0.45	2.00	0.010	0.008	1.80	0.10	0.35

* As per AMS 6257

*Mechanical Properties

Tensile Strength	1,931MPa min
0.2% Yield	1,586 MPa min
Elongation	8% min
Reduction of Area	30% min

* Properties as per AMS 6257, response to heat treatment

Unrivalled Support

We have access to our Group's [UKAS Accredited Testing Laboratory](#), where our team of metallurgists offer unrivalled product support. We also provide a broad range of testing services, including Charpy, tensile and chemical analysis.

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